Trend Watch

Pilot praying after plane crash. US Navy photo courtesy of GeekPhilosopher.com

What Treatments Are Prescribed for Posttraumatic Stress Disorder?

by Elisa F. Cascade; and Amir H. Kalali, MD

The events of September 11, 2001, and the war in Iraq coupled with recent evidence suggesting a link between posttraumatic stress disorder (PTSD) and risk for heart attacks and coronary heart disease have resulted in increased research interest in finding an effective treatment regimen for the condition. To better inform psychiatrists on current practice patterns, this article presents data on the regimens most commonly used to treat PTSD.

METHODS

We obtained data on product treatment regimen from Verispan's Prescription Drug and Diagnosis Audit (PDDA) database from December, 2005, to November, 2006, for ICD-9 diagnosis code 309.81, posttraumatic stress disorder. PDDA captures data on disease state and associated therapy from 3,100 office-based physicians representing 29 specialties across the US.

RESULTS

As seen in Figure 1, only 40 percent of patients with PTSD were treated with monotherapy, 37 percent were treated with two agents, and 23 percent received three different products. Products used to treat PTSD can be categorized into five groups: Antidepressants, antipsychotics, benzodiazepines, sleep aids, and antiepileptics. The most commonly used drug class is antidepressants with 82 percent of PTSD patients receiving an antidepressant (Figure 2). Although many different regimens were identified, the top three regimens represented nearly 60 percent of all prescribed treatments:

- Antidepressants alone = 35%
- Antidepressant + benzodiazepine = 16%
- Antidepressant + antipsychotic = 9%

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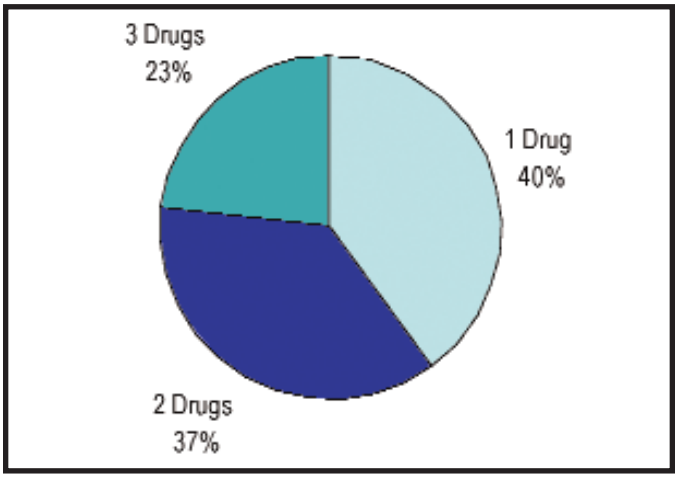

Figure 1. Source: Verispan PDDA, ICD-9 Diagnosis 309.81, December, 2005, to November, 2006.

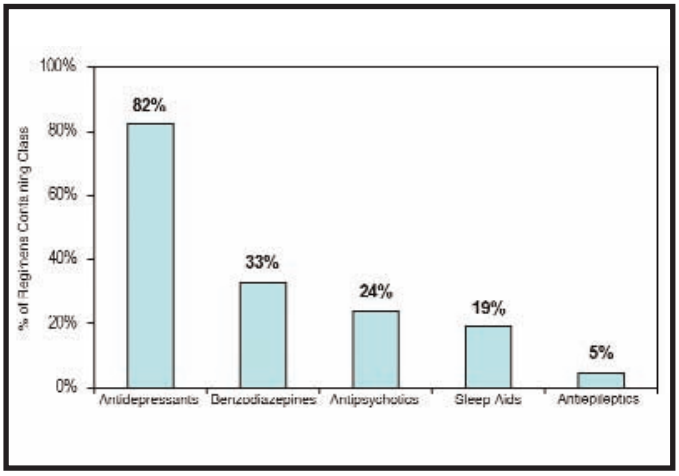

Figure 2. Verispan PDDA, ICD-9 Diagnosis 309.81, December, 2005, to November, 2006.

EXPERT COMMENTARY—
WHAT TREATMENTS ARE PRESCRIBED FOR POSTTRAUMATIC STRESS DISORDER?

by Ann M. Rasmusson, MD; and Candice Monson, PhD

The use of antidepressants to treat posttraumatic stress disorder (PTSD) has taken a solid foothold since the first placebo-controlled antidepressant trial showed the efficacy of imipramine and the monoamine oxidase inhibitor, phenelzine, in this disorder in 1991. Since then, several large, multicenter, placebo-controlled trials have demonstrated the efficacy of the serotonin-selective reuptake inhibitors (SSRIs), and led to approval by the US Food and Drug Administration (FDA) for sertraline and paroxetine in the treatment of PTSD. In addition, a multicenter, placebo-controlled trial has recently demonstrated the efficacy of the serotonin norepinephrine reuptake inhibitor, venlafaxine extended-release. Atypical neuroleptics with serotonin $5HT_{2A}$ and noradrenergtic α_1 receptor antagonist properties have also been shown to help in the treatment of some symptoms of PTSD, such as impulsive aggression, and may benefit patients showing only partial responsiveness to antidepressants. Benzodiazepines, while often prescribed, have not been convincingly shown to improve PTSD symptoms. Clinicians should also be aware that a number of well-controlled studies have established the efficacy of cognitive-behavioral therapies for PTSD. The effect size advantage (i.e., number of standard deviations separating mean treatment changes) of cognitive-behavioral over medication treatments is generally about 0.50 to 0.75. Additionally, therapeutic gains that result from cognitive-behavioral treatments are characteristically maintained over long periods (e.g., 5+ years). Unfortunately, few drug trials have examined symptom exacerbation rates upon medication discontinuation. In the near future, clinicians should look for results of combination medication and cognitive-behavioral treatment trials in PTSD. The cognitive-behavioral studies conducted thus far enrolled patients either off of medication or on stable regimens of a variety of psychotropic medications. Consequently, we do not yet know whether the use of medications improves, hinders, or has no effect on cognitive-behavioral therapy outcomes.

Practitioners may also want to watch for the development of new medications that address possible biological and genetic differences that may influence response to current PTSD treatments. For example, recent research suggests that SSRIs may improve PTSD symptoms by increasing brain levels of the neuroactive steroids, allopregnanolone and pregnanolone. These compounds enhance the effects of gamma-amino-butyric acid (GABA) at $GABA_A$ receptors, including those subtypes resistant to benzodiazepines; this confers potent anxiolytic, sedative, neuroprotective, and anesthetic effects. The apparent inability of some women with PTSD to adequately synthesize these steroids is associated with increased PTSD reexperiencing and depressive symptoms and may underlie SSRI resistance. Such individuals may benefit from synthetic allopregnanolone-like compounds. Prazosin, a noradrenergic $\alpha 1$ receptor antagonist used to treat hypertension, is undergoing multisite trials to test its efficacy in reducing nightmares. D-cycloserine, a partial agonist at N-methyl-D-aspartate (NMDA) receptors, and propranolol, a β-adrenergic receptor antagonist, are also being tested for their capacity to enhance the effects of prolonged exposure therapy. In the meantime, other glutamatergic agents are undergoing development for the treatment of PTSD symptoms in general.

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